

## ABSTRACT OF THE DISCLOSURE

The present invention prevents the diffusion of an aluminum element into a polysilicon layer in a heating step when an  
5 aluminum-based conductive layer is used in a source/drain electrode which is in contact with low-temperature polysilicon whereby the occurrence of defective display can be obviated. An aluminum-based conductive layer is used in a source/drain electrode and a barrier layer made of molybdenum or a molybdenum  
10 alloy layer is formed between the aluminum-based conductive layer and a polysilicon layer. Further, a molybdenum oxide nitride film formed by the rapid heat treatment (rapid heat annealing) in a nitrogen atmosphere is formed over a surface of the molybdenum or the molybdenum alloy which constitutes the barrier layer.